

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,884	04/15/2004	Stefan Schneidewind	A36219 - 066340.0188 7297	
21003 BAKER BOT	7590 01/10/2008 TS I. I. P	EXAMINER		
30 ROCKEFELLER PLAZA			RASHIDIAN, MOHAMMAD M	
44TH FLOOR NEW YORK, NY 10112-4498		ART UNIT	PAPER NUMBER	
,			2624	
				<u>-</u>
			NOTIFICATION DATE	DELIVERY MODE
			01/10/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DLNYDOCKET@BAKERBOTTS.COM

	Application No.	Applicant(s)				
	10/824,884	SCHNEIDEWIND ET AL.				
Office Action Summary	Examiner	Art Unit				
	Mehdi Rashidian	2624				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period way reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be timustilly apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE!	lely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on 15 Ap	<u>oril 2004</u> .					
2a) This action is FINAL . 2b) ⊠ This	This action is FINAL. 2b)⊠ This action is non-final.					
,—	3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims						
4) Claim(s) 1-7 is/are pending in the application. 4a) Of the above claim(s) is/are withdraw 5) Claim(s) is/are allowed. 6) Claim(s) 1-7 is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or						
Application Papers						
9) ☐ The specification is objected to by the Examine 10) ☑ The drawing(s) filed on 15 April 2004 is/are: a) Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct 11) ☐ The oath or declaration is objected to by the Ex	\boxtimes accepted or b) \square objected to the drawing(s) be held in abeyance. See ion is required if the drawing(s) is obj	e 37 CFR 1.85(a). ected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C. § 119						
12) ⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ⊠ All b) □ Some * c) □ None of: 1. □ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ite				

DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Willem van Dijk et al. (US Pub. No. 2001/0014170) henceforth referred to as Dijk.

Regarding Claim 1, Dijk teaches, a method for increasing the accuracy of the positioning of a first object relative to a second object by utilizing a recognition of structures on the second object that have a minimum structure width, the method comprising the steps of: (1) acquiring images of an observation region that encompasses at least the first object and a desired position on the second object; (figs. 2,3a-3c, abstract, ¶ [0030]),

- (2) at a first instant T.sub.o, by means of a first recognition method having a
 resolution accuracy that is higher or better than the minimum structure width,
 determining the position of the first object relative to a second object; (figs. 2,3a3c, abstract, ¶ [0062]),
- and (3) repositioning the first object relative the second object to the desired
 position at a second instant, wherein at least one of the first and the second
 objects are movable using a positioning device, wherein before about the second

Application/Control Number: 10/824,884 Page 3

Art Unit: 2624

instant, by means of a second recognition method, a relative displacement of the first object with respect to the second object is determined with respect to their positions at the first instant, (¶ [0062]),

and wherein step (3) further comprises correcting for the relative displacement of the first object with respect to the second object, (abstract, ¶ [0063]).

Regarding Claim 2, Dijk teaches, the method of claim 1 wherein a pattern recognition method is used as the second recognition method, (¶ [0062]).

Regarding Claim 3, Dijk teaches, the method of claim 2 wherein the resolution accuracy of the pattern recognition method is lower or poorer than about the minimum structure width, (¶ [0040]).

Regarding **Claim 4**, Dijk teaches, the method of **claim 2**, further comprising: bringing the positioning device to a basic position x.sub.o, y.sub.o, .phi..sub.o at about the first instant T.sub.o, and further in temporal proximity to the first instant T.sub.o using the pattern recognition method to acquire a first image pattern from the observation region that encompasses at least a portion of the second object and a second image pattern from the observation region that encompasses at least a portion of the first object, (fig. 2, abstract, ¶ [0014]),

Art Unit: 2624

• bringing the positioning device to a basic position x.sub.o, y.sub.o, .phi..sub.o before about the second instant, and further using the pattern recognition method to acquire a third image pattern from the observation region that encompasses at least a portion of the second object, and a fourth image pattern from the observation region that encompasses at least a portion of the first object, (figs. 1-2, ¶ [0018]),

by means of the pattern recognition method, determining a first pattern displacement from the first and third image patterns and a second pattern displacement from the second and fourth image patterns and further determining the relative displacement from the first and second pattern displacements; and using the relative displacement to correct the position x.sub.o, y.sub.o, .phi..sub.o of the positioning device to a desired position at the second instant, (¶ [0020-25]).

Regarding **Claim 5**, Dijk teaches, the method of **claim 4** wherein at least one of the first image pattern and the third image pattern is respectively identical the second image pattern and the fourth image pattern, (¶ [0054-0059]).

Regarding Claim 6, Dijk teaches, the method of claim 1 further comprising, after the second object is processed, determining the relative displacements of the first object and further objects that have minimum structure widths using steps that are identical to

Application/Control Number: 10/824,884 Page 5

Art Unit: 2624

steps (1)-(3) to correct the relative positions of the further objects and the first object,

(fig. 1, ¶ [0054-0059]).

Regarding Claim 7, Dijk teaches, the method of claim 1 further comprising, after the

second instant, repeating in time the determination of the relative displacement of the

first and second objects so as to maintain a desired position of the first object on the

second object. (¶ [0054-0059]).

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mehdi Rashidian whose telephone number is (571) 272-

9763. The examiner can normally be reached on Mon-Thurs 9:00AM to 8:00PM, ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Samir Ahmed can be reached on (571) 272-7413. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/824,884 Page 6

Art Unit: 2624

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mehdi Rashidian 1/7/2008

SAMIR AHMED SUPERVISORY PATENT EXAMINER